



**ALDON CORPORATION**

# MATERIAL SAFETY DATA SHEET

221 Rochester Street  
Avon, New York 14414-9409  
(585) 226-6177

MSDS No.: AA0005  
Effective Date: January 1, 2007

## SECTION I NAME 24 HOUR EMERGENCY ASSISTANCE

<b>Product</b>	Acetic Acid, Glacial
<b>Chemical Synonyms</b>	Ethanoic Acid; Methanecarboxylic Acid
<b>Formula</b>	CH <sub>3</sub> COOH
<b>Unit Size</b>	up to 2.5 Lt.
<b>C.A.S. No.</b>	64-19-7

 <b>NFPA</b> HAZARD RATING MINIMAL SLIGHT MODERATE SERIOUS SEVERE 0 1 2 3 4	<b>CHEMTREC</b> <b>800-424-9300</b> Day 585-226-6177	<table border="1"> <tr> <td>Health</td> <td>2</td> </tr> <tr> <td>Fire</td> <td>2</td> </tr> <tr> <td>Reactivity</td> <td>2</td> </tr> </table>	Health	2	Fire	2	Reactivity	2
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Fire	2							
Reactivity	2							
		<b>HMIS*</b>						

## SECTION II INGREDIENTS OF MIXTURES

Principal Component(s)	%	TLV Units
Acetic Acid, Glacial	99.8%	TWA: 10 ppm STEL: 15 ppm
<b>DANGER! CORROSIVE! POISON!</b>		
<b>CAUSES SEVERE BURNS. MAY BE FATAL IF SWALLOWED.</b>		

## SECTION III PHYSICAL DATA

Melting Point (°F)	16.7°C (62°F)	Specific Gravity (H <sub>2</sub> O = 1)	1.049 @ 20/4°C
Boiling Point (°F)	118.1°C (244°F)	Percent Volatile by Volume (%)	100%
Vapor Pressure (mm Hg)	11.4 mm @ 20°C (68°F)	Evaporation Rate (Butyl acetate =1)	0.97
Vapor Density (Air=1)	2.07		
Solubility in Water	Complete.		
Appearance & Odor	Clear, colorless liquid; strong acid vinegar-like odor.		

## SECTION IV FIRE AND EXPLOSION HAZARD DATA

<b>Flash Point (Method Used)</b>	42.7°C (109°F) CC.	<b>Flammable Limits in Air % by Volume</b>	Lower 5.4	Upper 16.0
<b>Extinguisher Media</b>	Use carbon dioxide (CO <sub>2</sub> ), dry chemical, alcohol foam. Large spills, use water spray or alcohol foam.			

### SPECIAL FIREFIGHTING PROCEDURES

Water in a straight hose stream will scatter and spread fire and should not be used. Use water spray to cool container. In fire conditions, wear a NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing. Gives off flammable vapor above its flash point, 109°F. Vapor forms explosive mixtures with air. Dangerous in contact with chromic acid, sodium peroxide, nitric acid or other oxidizing materials.

Autoignition Temperature: 464°C (869°F).

### UNUSUAL FIRE AND EXPLOSION HAZARDS

Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by heat or spark. Acid reacts with most metals to release hydrogen gas which can form explosive mixtures with air. Moderate fire hazard, when exposed to heat and flame; can react vigorously with oxidizing materials. May produce severe acid burns to skin and eyes. Prolonged breathing of concentrated vapor may be harmful. Glacial acetic acid contracts upon freezing (specific gravity of liquid at 62.1°F is 1.05 and of the solid at 62°F is 1.27).

(2004 EMERGENCY RESPONSE GUIDEBOOK, RSPA P 5800.9, GUIDE PAGE NO. 132)

**D.O.T.** Acetic acid, glacial, 8, (3), UN2789, PG II, Ltd Qty ≤ 1 Lt

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

## SECTION V HEALTH HAZARD DATA AA0005

<b>Threshold Limited Value</b>	TWA: 10 ppm STEL: 15 ppm (ACGIH 2001) Toxicity data: orl-rat LD50: 3.3 g/kg.
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<b>Effects of Overexposure</b>	<b>INGESTION:</b> Causes severe irritation of and damage to mouth, throat and stomach. May be fatal. <b>EYES:</b> Can cause chemical burn. Damage irreversible. Vapors are severely irritating. <b>SKIN:</b> Can cause chemical burn. <b>INHALATION:</b> Causes severe irritation of nasal passages, throat and lungs. Can cause pulmonary edema. Target organs: Respiratory system, eyes, skin, teeth.
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<b>Emergency and First Aid Procedures</b>	<b>INGESTION:</b> Call physician or Poison Control Center immediately. Induce vomiting only if advised by appropriate medical personnel. Never give anything by mouth to an unconscious person. <b>EYES:</b> Check for and remove contact lenses. Flush thoroughly with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get immediate medical attention. <b>SKIN:</b> Remove contaminated clothing. Flush thoroughly with mild soap and water. If irritation occurs, get medical attention. <b>INHALATION:</b> Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
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## SECTION VI REACTIVITY DATA

<b>Stability</b>	Unstable Stable	Conditions to Avoid	Keep from freezing. Avoid excessive temperature, heat, sparks and open flame.
		X	

<b>Incompatibility (Materials to Avoid)</b>	Oxidizing agents, for example, hydrogen peroxide, nitric acid, perchloric acid or chromium trioxide; strong alkalies such as sodium hydroxide.
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<b>Hazardous Decomposition Products</b>	Dangerous; when heated to decomposition, emits toxic and corrosive fumes of carbon monoxide and/or carbon dioxide.
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<b>Hazardous Polymerization</b>	<b>Conditions to Avoid</b>
May Occur Will Not Occur	Not applicable.
	X

## SECTION VII SPILL OR LEAK PROCEDURES

<b>Steps to be taken in case material is released or spilled</b>	Eliminate all sources of ignition. Avoid eye or skin contact. To neutralize odor or acidity, cover contaminated surface with soda ash or sodium bicarbonate. Place leaking containers in a well-ventilated area with spill containment. If fire potential exists, blanket spill with alcohol-type aqueous film-forming foam. Cover spill with absorbent material and place in suitable container for disposal. Avoid runoff to sewers and ditches which lead to natural waterways.
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<b>Waste Disposal Method</b>	Discharge, treatment, or disposal may be subject to Federal, State or Local laws. These disposal guidelines are intended for the disposal of catalog-size quantities only.  Preferred method of waste disposal are incineration or biological treatment in federal/state approved facility.
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## SECTION VIII SPECIAL PROTECTION INFORMATION

<b>Respiration Protection (Specify Type)</b>	For laboratory use work in ventilation hood or wear a NIOSH/MSHA-approved respirator.			
<b>Ventilation</b>	Local Exhaust	Recommended.	Special	No.
	Mechanical (General)	Recommended.	Other	No.
<b>Protective Gloves</b>	Rubber.		<b>Eye Protection</b>	Chemical safety goggles, face shield.
<b>Other Protective Equipment</b>	Lab coat, apron, vented hood, proper gloves, fire extinguisher, eye wash station.			

## SECTION IX SPECIAL PRECAUTIONS

<b>Precautions to be Taken in Handling &amp; Storing</b>	Store in a well-ventilated area away from heat, sparks and open flame. Keep in tightly closed container, at a temperature above 17°C (63°F). Store separate from oxidizing materials and combustible materials. Remove cap slowly.
<b>Other Precautions</b>	Read label on container before using. Do not wear contact lenses when working with chemicals. For laboratory use only. Not for drug, food or household use. Keep out of reach of children.  Avoid contact with eyes, skin and clothing. Avoid breathing vapor. Use adequate ventilation. Wash thoroughly after handling. Remove and wash contaminated clothing. Protect against physical damage. If frozen, thaw by moving closed container to warm area.

Revision No. 9 Date 01/01/07 Approved James A. Bertsch Chemical Safety Coordinator JAB

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